

1   **DISK DRIVE DISABLING BEMF DETECTION WINDOW TO REDUCE ACOUSTIC**  
2   **NOISE WHILE USING WEDGE SPINDLE SPEED CONTROL**

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4                   **ABSTRACT OF THE DISCLOSURE**

5           A disk drive is disclosed employing either back electromotive force (BEMF) spindle  
6    speed control mode or wedge spindle speed control mode. A BEMF detector monitors the  
7    BEMF voltage generated by the windings of the spindle motor to generate a BEMF speed error.  
8    The BEMF spindle speed control mode is used to spin up the disk to an operating speed, and the  
9    wedge spindle speed control to maintain the disk at the operating speed. While in the wedge  
10   spindle speed control mode, a BEMF detection window is disabled to reduce acoustic noise.